

Support Matrix for Communication and Method Used to Operate a Trading Centre by  
Means of the Same

**Specification**

The invention relates to a support matrix for communication and method used to operate a trading center by means of the same, preferably on the Internet.

An ever increasing number of companies are in the process of changing over to conducting at least part of their business via the Internet. The conducting of electronic business (E-commerce) is of particular interest in this connection. The additional services offered are causing increasing numbers of businesses to move away from the classic pure distribution approach. In particular, electronic trading centers should be mentioned here, in which service providers can be interconnected by means of a coordination point (Clearingboard) for an electronic data interchange (EDI), as well as for a communication between two business partners (B2B). However, it has not yet been possible with the prior art to be able to select from among different trading scenarios in an electronic trade center, which limits trade to a significant degree.

The object of the current invention is to provide a support matrix for communication and method used to operate a trading center by means of the same, which permit the greatest possible diversity of electronic commerce to be conducted.

The object according to the invention is attained on the one hand by means of a support matrix for communication, where the matrix is at least four-dimensional, each matrix dimension has at least one selection list, and the selection lists include at least a

first initiator list, a second market segment list, a third product list, and a fourth trading scenario list.

The provision can be made that each selection list includes a number of elements, which can be individually marked for selection or unselection, where each marking of one of the elements can preferably be stored and/or recalled.

The invention also proposes that each element be scalable.

Furthermore, the invention proposes that the elements of the initiator list can be used to select at least between buyer and/or seller.

The provision can also be made that the elements of the market segment list can be used to select at least one market segment, e.g. in the chemical field, in the form of the pharmaceutical industry, food industry, detergent industry, lubricant industry, and/or the like.

The invention also proposes that the elements of the product list can be used to select at least one product group and/or a product, e.g. in the chemical field, in the form of oleo chemicals, petrochemicals, anorganic chemicals, fine chemicals, and/or other chemicals.

Furthermore, the invention proposes that the elements of the trading scenario list can be used to select at least one trading scenario, e.g. an auction, including a real time auction and/or supported auction, a bulletin board, a direct business connection, and/or the like.

Modifications of the invention are characterized by means of at least one services list, the elements of which can be used to select a service provider, in particular for an administrative and/or logistical function.

There can also be the provision that the service provider to be selected can be a liquidating company, a transportation company, a logistics company, a filling company, a packing company, a bank, an insurance company, a laboratory, and/or the like.

Furthermore, the invention proposes that the services list can be selected by means of the trading scenario list or represents a fifth dimension of the matrix.

Particular embodiments of the invention are characterized by means of at least one company list, which can preferably be selected by means of the market segment list, the product list, the trading scenario list, and/or the services list.

There are also embodiments according to the invention, which are characterized by means of at least one product specifications list, the elements of which can be used to select product specifications e.g. quantity, condition, packaging, and/or the like.

It is therefore possible to provide that the product specifications list can be selected by means of the product list.

On the other hand, the object relating to the method is attained according to the invention through the use of a matrix according to the invention in that the matrix is prepared by an operator, the matrix is called up by an initiator, preferably via the Internet, the called matrix is processed by the initiator, preferably at the initiator's

workstation, the processed matrix is sent to the operator, preferably via the Internet, and the sent matrix is processed by the operator.

It is possible to provide that the operator includes an Internet platform operator and/or at least a service provider.

Furthermore, the invention proposes that at least a first element of the selection lists is selected by the initiator, at least a second element of the selection lists is unselected by the initiator, and/or at least a third element of the selection lists is not processed by the initiator, where the trade is routed to the first element by the operator, the trade is not routed to the second element by the operator, and/or the third element is incorporated into the trade.

Finally, the invention proposes that the operator deliberately preserve the anonymity of the initiator.

The invention is thereby based on the knowledge that at least four options are required, particularly when conducting a commercial transaction electronically, in order to be able to depict the commercial transaction on the conventional market, where the options should permit the selection of an initiator, at least one market segment, at least one product, and at least one trading scenario and the options are correlated, i.e. can reciprocally require or exclude one another. For example, a selection can be made from among four trading scenarios, namely a real time auction, a conventional auction, a supported auction, and a bulletin board, namely as follows:

feature	real time auction		auction		supported auction		bulletin board
	auction	reverse auction	auction	reverse auction	auction	reverse auction	
initiator	seller	buyer	seller	buyer	seller	buyer	seller/ buyer
operator	no	no	no	no	yes	yes	no

Other features and advantages of the invention ensue from the following description, in which preferred embodiments of the invention will be explained individually in conjunction with schematic drawings.

Fig. 1 is a block circuit diagram of a structural design for executing a method according to the invention;

Fig. 2 is a flowchart showing the progression of a method according to the invention;

Fig. 3 shows three dimensions of a matrix according to the invention; and

Fig. 4 shows the construction of an Internet homepage for executing a method according to the invention.

As can be inferred from Fig. 1, in a method according to the invention, there is a differentiation between an operator side B and an initiator side I. The term "operator" is understood to mean at least one Internet platform operator in the case of a hosting embodiment and a Clearingboard in the case of the offering of services in addition to the actual distribution business. The Clearingboard performs the services e.g. transport

organization, credit limit monitoring, credit insurance, payment transactions, deadline coordination, the issuance of securities, e.g. in the form of securities data sheets, certificates of origin, analysis certificates, and the like, i.e. conducts transactions in particular with a transport and logistics company, e.g. a bank, an insurance company, and a laboratory between an initiator and the business partner solicited by the initiator in the event that an actual purchase occurs. The initiator can be a buyer, seller, or buyer/seller (trader).

The Clearingboard communicates via the workstations 1a, 1b, 1c with the server 2 of the Internet platform operator, which in turn has a dedicated line 5 to the server 101, which line passes through a firewall 3 and a router 4. The web server 10 and the Internet 100 permit a direct communication, for example, between a buyer 10 and a seller 20 on the initiator side I. Preferably, all communication occurs electronically, namely via XML and in Biztalk.

Fig. 2 shows the functionality of a method according to the invention in the implementation of a market structure, where by means of a database query, an initiator can at any time obtain within seconds a personal view of his trading center by using a specially designed inventory control program, e.g. in the form of an ERP solution (Enterprise Resourcing Program solution).

A method according to the invention shown in Fig. 2 proceeds as follows:

By means of a readiness query, an initiator indicates that he would like to enter into communication with the operator. Taking into consideration particular initiator parameters, auction details, exclusion criteria, bidding details, a transaction history, or

the like, the operator then sends the initiator a logon form, which the initiator must then fill out by inputting data. After the initiator has filled out the logon form, the operator prepares a trade form, which allows the initiator to input particular trade requests, which then permits the operator to generate a personalized trade center as a final result.

The above-described communication between the initiator and the operator occurs, as shown in Fig. 2, via an SQL web, which is updated by means of a continuous bidirectional data alignment with an operator database, e.g. an ERP database. The ERP database can consequently access a large amount of current information e.g. product information, segment information, trading scenario information, regulations, calculation models, etc.

As a whole, the method according to the invention is thus distinguished by means of a splitting of the logic, namely the establishment of an initiator side or an input side and an operator side or a check side. On the input side, the initiator enters his inputs and sends them to the operator, i.e. the check side. The contents of the input side, the selection possibilities, and the address come from a database, each updated at the time it is called up. The check side takes the inputs from the input side and checks whether these inputs are permissible, wherein tests are run for plausibility, creditworthiness of the initiator, input format, completeness, and the like. If the inputs are permissible, then the corresponding information is processed and is written into the database. Otherwise, error prompts are displayed, which assures that the database always filled with consistent data, i.e. incorrect inputs do not have a negative impact on the database.

For example, if a buyer in the chemical field wishes to purchase particular chemicals, then as a first step, he can select a particular market segment; in Fig. 3, the detergent industry has been selected from among the market segments of the pharmaceutical industry, food industry, detergent industry, lubricant industry. In a second step, the buyer can indicate a desired product, e.g. from the field of oleo chemicals, petrochemicals, anorganic chemicals, fine chemicals, or residual stocks; in Fig. 3, fine chemicals have been selected. The matrix according to the invention first permits the buyer to select from among various trading scenarios, e.g. a real time auction, a conventional auction, a supported auction, and a bulletin board; according to Fig. 3, the buyer has selected an auction supported by the operator. The operator then conducts the commercial transaction and proffers the services listed above.

Alternatively, a potential buyer could post a request for a particular chemical from the oleo chemical field, which is not required immediately, on an electronic bulletin board, with an indication of the validity period. A potential buyer could purchase a chemical intermediate product by selecting a conventional reverse auction and comparing a number of offers from various sellers. This extreme flexibility in the conducting of commercial transactions, which is cited above only by way of example, coupled with the focus on different market segments and products encourages customer loyalty since the buyer is not forced to contact numerous E-business bidders. The entire business transaction is considerably simplified in the case of a supported auction and through the use of a Clearingboard. In this connection, the operator supplies not only an electronic trading center, but also simultaneously performs



numerous logistical and administrative functions and even permits an electronic management of business relationships.

Fig. 4 shows an Internet homepage of an operator. Information about the operator can be requested from this Internet homepage and naturally commercial transactions can be conducted via the matrix according to the invention by means of selecting and/or unselecting particular elements from selection lists that represent the options of the matrix. The Internet homepage shown in Fig. 4 also permits a Clearingboard to be contacted in order to perform logistical and/or administrative tasks.

The selection of elements from the selection lists of the matrix according to the invention by the initiator preferably takes place on the initiator side (front end) so that even if there is temporarily no connection between the initiator side I and the operator side B, an element selection can take place, which is communicated the next time the initiator side I is connected to the operator side B.

It should also be emphasized that the matrix according to the invention, due to its list structure or table structure, not only accelerates and simplifies commerce, but also it accelerates and simplifies an evaluation of this commerce, which makes it possible to optimize a user guidance as well as a market analysis.

Naturally, the use of the matrix according to the invention and the method according to the invention is not limited to the chemical field.

The features of the invention disclosed in the above specification, the drawings, and the claims can be essential to the realization of the invention in its various embodiment forms either individually or also in any arbitrary combination.